MEMORANDUM

HOUSE FISCAL AGENCY

DATE: December 3, 2010

TO: Interested Parties

FROM: William E. Hamilton

RE: Transportation Needs and Revenue Distribution

Introduction

Michigan residents rely on a safe efficient transportation network for many reasons: to commute to work and school, for entertainment and social connections, to access medical services. Transportation is also a critical part of the state economy. Transportation and warehousing, as a stand-alone segment of the economy, represents $10 billion of Michigan's $382 billion Gross Domestic Product, and accounts for 90,300 direct jobs out of total Michigan private employment of 3.2 million.[1] Transportation is also necessary for the success of other parts of the state economy, including the most important segment, manufacturing.

The state transportation network is a blend of public and privately-owned facilities and operations. Freight railroads and the Great Lakes shipping industry are privately owned and receive relatively little direct state support. While the commercial aviation industry is privately owned, the industry uses state airports which are almost exclusively publicly owned. Michigan airports do not receive state operating assistance but do receive capital infrastructure support of approximately $120 million per year from joint state-federal airport improvement programs.

Highway systems and public transit programs are the two components of the state transportation network that are almost exclusively under public ownership. The state highway system, broadly understood, is the most important component of the state's total transportation network.

The balance of this paper will discuss transportation funding issues, primarily as they relate to the state highway system, and to a lesser extent, public transportation systems. The paper deals exclusively with funding provided by or through state government. Some dedicated transportation revenue is raised locally by counties, cities, villages, townships, and local transit agencies. However, these revenues are dedicated to local programs, not statewide transportation needs. And these local sources of transportation revenue are relatively minor; they represent approximately $400 million per year – only about 11% of total public spending on transportation.

[1] Gross Domestic Product figure from Bureau of Economic Analysis data for 2008; employment data from Michigan Labor Market Information, Michigan Department of Labor and Economic Growth, September 2010.

State Transportation Revenue and Distribution
Most funding for Michigan transportation programs flows through the state's $3.2 billion transportation budget.[2] Approximately two-thirds of the appropriated revenue comes from state restricted funds, and approximately one-third from federal-aid transportation programs. There is no state General Fund support in the transportation budget.

State-Restricted Revenues
Approximately $2 billion comes from state resources – primarily motor fuel taxes and vehicle registration taxes, in approximately equal measure.

These constitutionally restricted funds are first credited to the Michigan Transportation Fund (MTF) and then distributed to the following primary recipients in accordance with the provisions of Public Act 51 of 1951 (Act 51):

- To the Comprehensive Transportation Fund (CTF) for public transportation programs, including capital and operating assistance to 79 local public transit systems
- To the State Trunkline Fund (STF), for construction and preservation of the state trunkline system, and administration of the Michigan Department of Transportation
- To 83 county road commissions to maintain county road systems
- To 533 cities and villages to maintain city and village street systems

Act 51 also earmarks MTF revenue for certain targeted transportation funds and categorical programs: the Transportation Economic Development Fund (TEDF), the rail grade crossing account, and the Local Bridge Fund. **Approximately 65% of the MTF distribution is made to local road agencies or to local agency programs, including public transit programs**.

Although Act 51 act has been amended a number of times since 1951, the basic MTF distribution formula framework remains unchanged.[3]

Federal-Aid Revenue
In addition to state restricted revenue, the state transportation budget appropriates approximately $1 billion in federal revenue available to the state through the multi-year federal aid authorization program, *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).* [4] SAFETEA-LU apportions funds to states through various categorical programs.

---

[2] This figure is based on the FY 2010-11 enacted state transportation budget (HB 5889) which was developed from January 2010 revenue estimates. The state transportation budget has ranged from $3.0 billion to $3.4 billion during the last ten years. The transportation budget represents approximately 7% of the total $47 billion state budget.
[3] The current formula distribution of 39.1%, 39.1% and 21.8% of the net MTF balance to the STF, county road commissions, and cities and villages, respectively, is unchanged since 1982.
[4] SAFETEA-LU authorized the federal surface transportation programs for highways, highway safety, and transit for the five-year period 2005-2009. SAFETEA-LU expired on September 30, 2009 and has had several short-term extensions.

Because a significant number of federal-aid eligible roads and streets in Michigan are under the authority of local road agencies (county road commissions, cities, villages), Act 51 mandates that 25% of most federal aid program funds be set aside for projects under local jurisdiction.[5]

Considering the allocation of MTF revenue to local road agencies, local road agency access to categorical programs, the allocation of federal aid to local road agencies, and state and federal aid to public transit agencies and state airports, approximately 50% of the state transportation budget is distributed to local agencies and local programs.

Revenue Issues

Short-Term Revenue Issues

State generated MTF transportation revenue peaked in FY 2003-04 at **$2.064 billion** and has declined each year since, primarily due to long-term declines in fuel taxes (less driving and more fuel efficient cars) and, more recently, reductions in registration taxes (people may be trading down to less expensive vehicles). The MTF revenue estimate for FY 2010-11 is **$1.807 billion** – a reduction of $257 million from FY 2003-04.

Reductions in MTF revenue result in reduced amounts credited to the STF, to local road agencies, and to public transportation programs.

While there has *not* been a decline in the amount federal aid available to the state, there has been recent concern about the state's ability to provide the required non-federal match – most commonly 20% of project cost. An anticipated $84 million shortfall in state matching funds for FY 2010-11 would have caused the loss of $475 million in federal aid.

Potential problems matching federal aid in both FY 2009-10 and FY 2010-11 were both resolved. The department proposed, and the Legislature accepted, a plan to use a patchwork of one-time and short-term fixes to provide the match in both fiscal years. Some actions – such as $40 million in short term borrowing – will make the matching problem worse in subsequent years.

If additional state matching funds are not identified, the state trunkline program may lose approximately $500 million annually in federal aid starting in FY 2011-12. As a point of reference, the federal stimulus program provided approximately $900 million in transportation funding to the state over two years. [6]

Is Money the Performance Measure?

While there is obvious concern about the long-term decline in the primary state sources of dedicated transportation revenue (fuel taxes and registration taxes), and the immediate problem of

[5] The share of federal-aid eligible roads under local road agency jurisdiction is much higher in Michigan than most other states.

[6] The problem in providing sufficient matching funds for federal aid programs, and the potential loss of federal aid, has been focused exclusively the state trunkline program. It is not clear to what extent local road agencies will also have trouble providing matching funds for local federal aid programs.

matching federal revenue, the real question is whether state and federal revenues are sufficient to achieve statewide transportation goals. This brings us to more basic questions:

What are the state's transportation goals and priorities?
Are there measures for evaluating the efficiency and effectiveness of state transportation expenditures in meeting those goals and priorities?

MDOT Performance Measure – System Preservation
In 1997, the Michigan Department of Transportation adopted pavement and bridge condition performance goals and measures. The short-hand description of the pavement goal is that 90% of state trunkline pavement be in "good" condition by 2007. The department's classification of pavement as "good" or "poor" is based on a remaining service life model. The department established similar goals for state trunkline bridges.

The department uses an asset management process to identify which treatments to use at the optimal time to best preserve pavement. For example, the department may use capital preventive maintenance treatments to extend pavement life rather than waiting until pavements require more extensive and expensive reconstruction. The department's asset management process helps guide investments in order to preserve pavement in good condition and to prevent pavement from sliding into poor condition which is more expensive to fix.

The department met its pavement performance goal in 2007. However, based on its pavement performance models, the department will not be able to sustain pavement condition at current levels of investment. The department anticipates that pavement condition will start to deteriorate faster than it can keep up with preservation.

The department met the pavement performance goal in part by "front-loading" its capital reconstruction program through bonding. However, debt service payments reduce the amount of revenue available for the highway program in later years. The department estimates that over the next five years, the difference between estimated revenue and the revenue needed to maintain the state trunkline highway system at the 90% "good" condition will be approximately $2.4 billion, i.e. a shortfall of approximately of $470 million per year. Failure to make the investment in preserving the state trunkline infrastructure will result in a deterioration of pavement condition and higher future costs for reconstruction. The department has indicted that it also needs an additional $110 million per year to maintain state trunkline bridges at optimal performance levels.

The department uses a graph to illustrate current and projected state trunkline pavement condition. The graph, copied at the end of this paper, is used to illustrate the need for additional transportation revenue; it's often used as a proxy for the entire state highway network. However, the graph, and the transportation system it illustrates, represents the state trunkline system only – 8% of the total system.

This brings us back to the issue of transportation funding. The department indicates that it needs an additional $470 million per year just to keep from falling behind in preserving its existing highway infrastructure. Under the current Act 51 distribution formula, the STF receives only 35% of net MTF revenue – 65% is apportioned to local road agencies and public transportation programs. The Legislature would have to increase transportation taxes by $1.34 billion to generate the $470 million needed for state trunkline programs. **The $1.34 billion increase would equate to a 30 cent per gallon increase in the gasoline tax – the current tax is 19 cents per gallon – bringing the total tax to 49 cents per gallon.**

State Transportation Goals – System Improvements

The above discussion of transportation funding issues relates only to preservation needs of current state trunkline infrastructure. It does not consider funding for safety, economic development, or capacity improvement programs.

Capacity improvement needs are somewhat difficult to quantify. However, there are several major projects which the department would likely pursue if there were sufficient money: widening of I-75 in Oakland County, reconstruction of I-94 in Detroit, reconstruction of US-23 in Washtenaw County, completion of US-127 between St Johns and Ithaca. The I-75 and I-94 projects are estimated to cost approximately $1.0 billion each.

Any attempt to raise state transportation taxes to target these capacity projects would be thwarted by the current Act 51 formula; of each additional $1 million raised in state transportation taxes, $650,000 is distributed to the local road agencies and public transportation programs with only $350,000 reaching the STF.

Problems in Establishing and Implementing Statewide Goals

The problem in establishing *statewide* transportation goals, directing state resources towards achieving those goals, and measuring performance in relation to those goals, is fragmentary nature of the state transportation system and the current formula-driven method of distributing revenue.

There is not a single state transportation system; there are in fact 617 separate road jurisdictions in the state – 83 county road commissions, 533 cities and villages, and the Michigan Department of Transportation – not to mention 79 local public transit systems.

As described above, state transportation revenue is distributed or allocated to road agencies by statutory formula, or allocated to statutory categorical programs (TEDF, rail grade crossings, Local Bridge Program). In many cases funds allocated to a categorical program are further suballocated by population or jurisdiction.

This fragmentation of the state transportation network, and the related formula-driven distribution of funds, promote inefficiencies and do not support *statewide* transportation goals.

The following examples illustrate problems in the current method of allocating transportation funding:

Example: **Many Small Road Agencies**
State law (Act 51) allocates state transportation revenue to all 533 cities and villages. Of these, 276 have a census population less than 2,000; 324 have less than 6 primary street miles. Two villages receive a distribution of MTF funds but have no streets under local jurisdiction at all.

Example: **Fund Balances**
Some distributions of MTF revenue are so small that local units have to save up money in fund balances in order to finance a major street reconstruction project.

Total city and village street fund balances were approximately $400 million at the end of 2006 – more than the total distribution of MTF revenue to cities in that year. The amounts vary from one municipality to another. Nine had negative fund balances. Twelve had zero balances. Three hundred and twenty six cities and villages in our sample had fund balances which exceed their 2006 allocation of MTF revenue.

While the fund balance represents a "snap shot" at the fiscal year closing date, and there may be valid reasons for the municipality to accumulate a fund balance, these balances do suggest inefficiencies in the allocation of state transportation revenue. At the same time some local agencies had significant street fund balances, MDOT sold STF bonds to help local road agencies finance federal-aid projects as part of the Local Jobs Today program.

Example: **Lack of Performance Measures, Performance Audits**
The 616 local road agencies are required to file an annual financial report with the Michigan Department of Transportation. However, the department is not allowed to perform either financial or performance audits of these local units. The department has little ability to monitor whether MTF funds were spent effectively or efficiently. In 1997, the Michigan Department of Treasury was directed in statute to do performance audits of local road agencies. To date, the Department of Treasury has issued only 16 such performance audits.

Example: **Lack of Performance Measures, Asset Management**
The Michigan Department of Transportation has adopted an asset management process to evaluate pavement and bridge condition against established goals and as a way to guide investments. While many local agencies have adopted asset management, many have not. And many agencies that have adopted asset management do not use it to support investment decisions.

Example: **Lack of Performance Measures, Local Bridge Program**
The Local Bridge Program is an example of a categorical program – state and federal funds are earmarked in statute for local bridges – which is further suballocated by jurisdiction.

Because there is separate grant funding for bridges, local road agencies do not use their regular road funds for major bridge projects; they generally wait for Local Bridge Fund grant funding even if means that some bridges are closed or load-limited for several years.

Despite this dedicated program, 113 of 820 municipal bridges, (13.8%), and 869 of 5,536 (15.7%) county-owned bridges are in poor or failure condition. There are no statewide goals for improving local bridge condition. The December 2009 Local Bridge Program report indicated that at current program funding levels, local bridges are deteriorating faster than they can be preserved under the Local Bridge Program.

Example: **Transportation Economic Development Fund (TEDF)**

The TEDF program is another categorical program which is subdivided into sub-programs and further suballocated by jurisdiction. The TEDF was established by Public Act 231 of 1987 as a targeted program to support economic growth. Act 51 earmarks $40.3 million in MTF revenue for the TEDF each year, as well as certain federal program funds.

Although the TEDF was created as a targeted economic development transportation program, the suballocation of program funds dilutes program effectiveness, and promotes the build-up of fund balance. Historically, the TEDF has had a running cash balance of at least $120 million.

State Trunklines as the Highest Priority

While there is likely a need for additional transportation funding on the local road system, the local road system is objectively less important than the state trunkline system.

The state trunkline system consists of all the Interstate, "M" and "US" numbered highways. While this represents only 8% of total route miles in the state – the balance are on local road systems – state trunklines account for over half of the vehicle miles traveled and a much higher percentage of commercial vehicle travel.

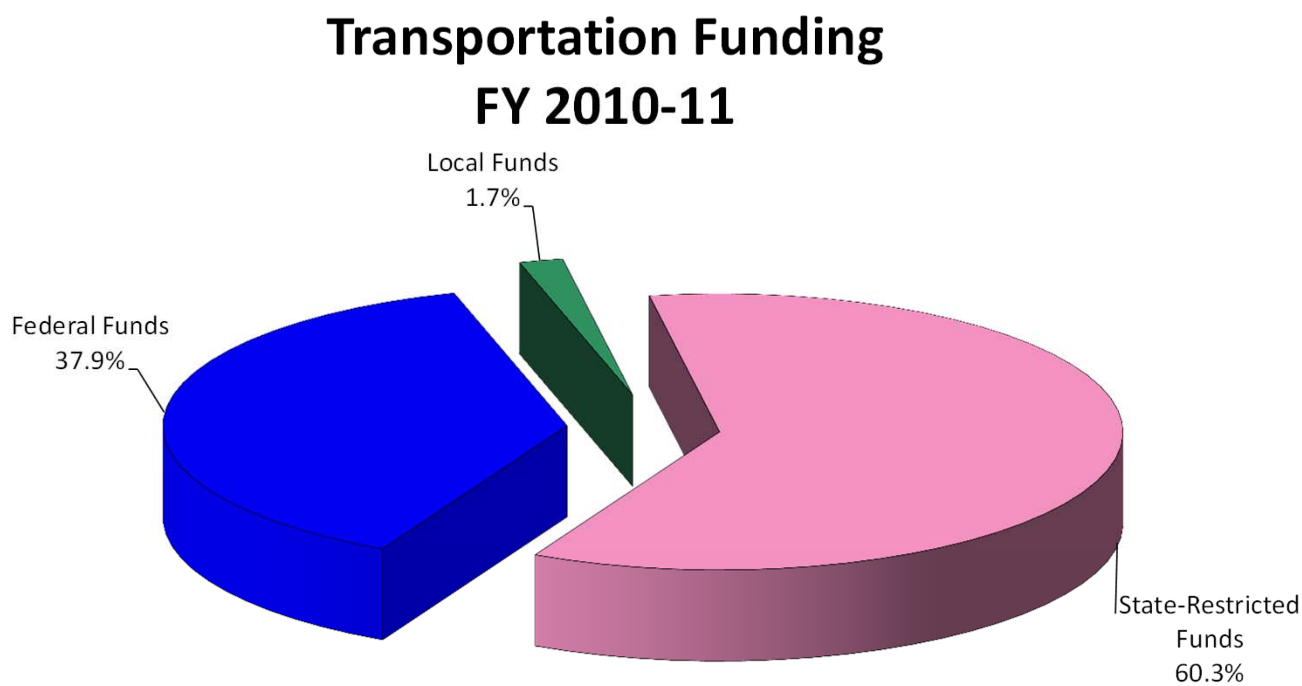
The Interstate expressways in metro Detroit have average daily traffic (ADT) counts of 100,000 to 166,000 vehicles per day, including as many as 15,000 commercial trucks. As a point of reference, commercial ADT on the busiest state trunkline in Traverse City is 920, and ranges from 400 to 700 across US-2 in the Upper Peninsula.

While the state trunkline system is clearly the highest priority system, the amount appropriated for this system is not based on an annual evaluation of needs on this system – it's based on the amount of transportation revenue generated and a funding distribution formula essentially unchanged since 1951.

Transportation Budget - FY 2010-11

As Enacted (with vetoes)
Summary by Source of Funds

State-Restricted Funds	$1,950,974,400	60.3%
Federal Funds	1,227,470,600	37.9%
Local Funds	56,496,000	1.7%
Adjusted Gross Appropriation	**$3,234,941,000**	**100.0%**

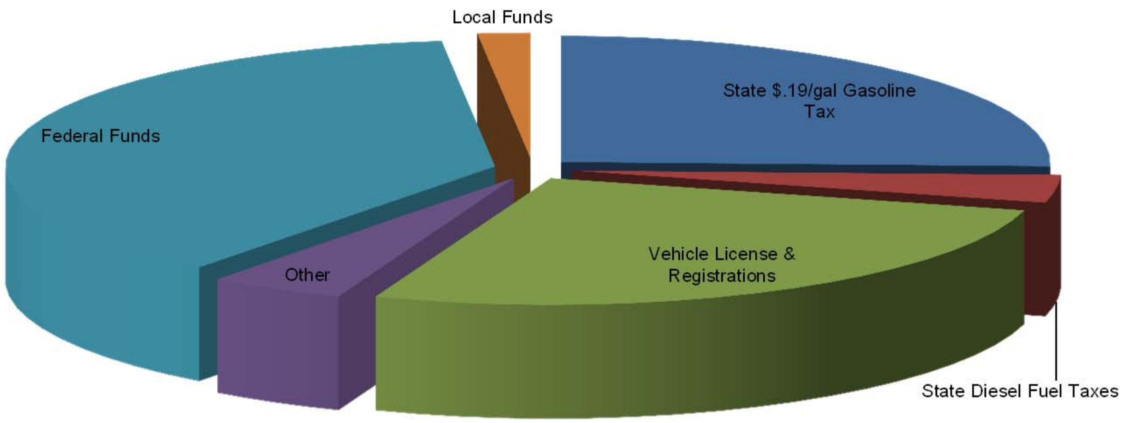


William E. Hamilton
12/3/2010

Transportation Budget - FY 2010-11

Sources of Transportation Revenue

		% of Total Rev.
State $.19/gal Gasoline Tax	$826,000,000	
State Diesel Fuel Taxes	115,000,000	
Vehicle License & Registrations	864,500,000	
Other	145,474,400	
Subtotal State Revenue	**$1,950,974,400**	60.31%
Federal Funds	1,227,470,600	37.94%
Local Funds	56,496,000	1.75%
Total Appropriated Funds	**$3,234,941,000**	100.00%



William E. Hamilton
12/3/2010

HOUSE FISCAL AGENCY

Transportation Budget - FY 2010-11

Sources of Transportation Revenue

Based on Treasury Estimate (5/26/10)

			% of State Rev.	% of Total Rev.
State $.19/gal Gasoline Tax	826,000,000	(1)		
Less Recreation Improvement Fund	(16,352,300)	(2)		
Gasoline Tax Subtotal	***809,647,700***	MTF	***41.50%***	***25.03%***
State Diesel Fuel Taxes	115,000,000	MTF	5.89%	***3.55%***
LP Gas Tax	400,000	MTF	0.02%	***0.01%***
Vehicle License & Registrations	864,500,000	MTF	44.31%	***26.72%***
Interest/Other	1,031,000	MTF	0.05%	***0.03%***
MTF Subtotal	***1,790,578,700***	***MTF***	***91.78%***	***55.35%***
				0
Permits, Interest, Other Misc. Rev.	38,180,000	STF	1.96%	***1.18%***
IRS Bond Rebate	7,523,400	STF	0.39%	***0.23%***
STF Subtotal	***45,703,400***	***STF***		
BWB - Tolls and Rentals	21,282,000	BWBF	1.09%	***0.66%***
BWB - Interest	63,000	BWBF	0.00%	***0.00%***
BWBF Subtotal	21,345,000	***BWBF***		
Auto-Related Sales Tax	80,000,000	CTF	4.10%	***2.47%***
Other Fees/Misc	336,000	CTF	0.02%	***0.01%***
Interest	188,000	CTF	0.01%	***0.01%***
		CTF	0.00%	***0.00%***
CTF Subtotal	***80,524,000***	***CTF***		
State Aviation Fuel Tax	5,500,000	SAF	0.28%	***0.17%***
Airport Parking Tax	6,000,000	SAF	0.31%	***0.19%***
Interest and other Misc. Rev.	1,041,000	SAF	0.05%	***0.03%***
SAF Subtotal	***12,541,000***	***SAF***		
Total State Revenues	**1,950,692,100**			
Vetoes	**(140,100)**		-0.01%	
Reconciling Difference	422,400		0.02%	
Appropriated State Revenues	***1,950,974,400***		***100.00%***	***60.31%***
Federal Funds	***1,227,470,600***			***37.94%***
Local Funds	***56,496,000***			***1.75%***
Total Appropriated	***$3,234,941,000***			***100.00%***

Notes

1. Each 1 cent of the gasoline excise tax will generate $43.5 million in revenue in FY 2010-11.
2. 2% of gasoline excise taxes are appropriated to the Recreation Improvement Fund.

Key to Fund Abbreviations

MTF = Michigan Transportation Fund

STF = State Trunkline Fund

BWBF = Blue Water Bridge Fund

CTF = Comprehensive Transportation Fund

SAF = State Aeronautics Fund

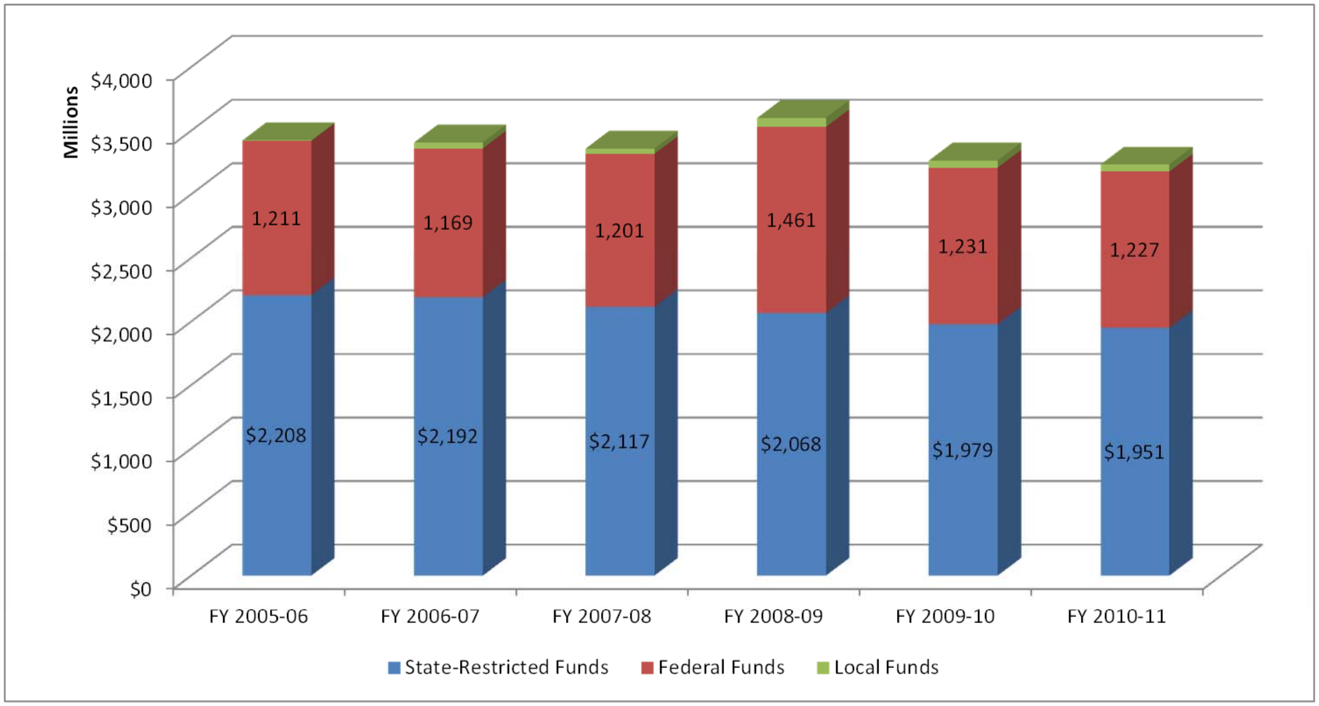
William E. Hamilton
12/3/2010

HOUSE FISCAL AGENCY

Transportation Budget

FY 2005-06 through 2010-11

	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
State-Restricted Funds	$2,208,159,900	$2,192,012,700	$2,116,605,000	$2,068,009,200	$1,978,578,800	$1,950,974,400
Federal Funds	1,210,650,300	1,168,679,700	1,200,740,600	1,460,995,800	1,230,744,500	1,227,470,600
Local Funds	6,100,000	47,500,000	42,850,000	71,624,200	56,453,400	56,496,000
Adjusted Gross Appropriation	**$3,424,910,200**	**$3,408,192,400**	**$3,360,195,600**	**$3,600,629,200**	**$3,265,776,700**	**$3,234,941,000**



(Excluding ARRA)

William E. Hamilton
12/3/2010

HOUSE FISCAL AGENCY

FY 2010-11 ESTIMATE OF TRANSPORTATION TAX REVENUES AND DISTRIBUTIONS PER ACT 51

May 2010 ORTA Estimate

MICHIGAN TRANSPORTATION FUND (MTF)

MTF Revenue = **$1,806,931,000**
Less $ 16,352,300 to DNR Recreation Improvement Fund
Net MTF Revenue = **$1,790,578,700**

MDOT Administration and Planning
$18,854,000

To Other State Departments
$29,720,500
(collection costs)

Comprehensive Transportation Fund
$151,911,000
(10% of MTF after above deductions)

Sales Tax
$80,000,000
The CTF receives additional funds from a portion of motor-vehicle related sales tax

Statutory Grants

Local Bridge Fund	$ 5,000,000
Local Program Fund	$33,000,000

Statutory Grants

Rail Grade Crossing	$ 3,000,000
Critical Bridge Debt Service	$ 3,000,000
3¢ of Gas Tax	$130,421,000
1/2¢ for State Trunkline Bridges	$ 21,736,800
1/2¢ for Local Bridges	$ 21,736,800
STF Debt Reduction	$ 43,000,000

Economic Development Fund
$40,275,000
($36,775,000 MTF + $3,500,000 earmarked for targeted industries)

Drivers License Fees
$12,000,000
The EDF receives additional funds from an earmark of certain drivers license fees.
Not appropriated in FY 2010-11.

MTF BALANCE = $1,288,923,600
plus

3¢ of Gas Tax	$ 130,421,400
Total to Distribute by formula	***$1,419,344,600***

COUNTY ROAD COMMISSIONS
Total **= $576,149,700**
39.1 % of MTF Balance $503,969,100
39.1% of 3¢ Gas Tax $ 50,994,600
(Plus $21,186,000 from the Local Program Fund)

CITIES AND VILLAGES
Total **= $321,231,100**
21.8% of MTF Balance $280,985,300
21.8% of 3¢ Gas Tax $ 28,431,800
(Plus $11,814,000 from the Local Program Fund)

STATE TRUNKLINE FUND
Total = **$619,700,500**
39.1 % of MTF Balance $503,969,100
39.1% of 3¢ Gas Tax $ 50,994,600
Plus $21,736,800 from ½ cent of gas tax,
and $43,000,000 for STF debt service

William E. Hamilton
December 3, 2010

Transportation Budget - FY 2010-11

As Enacted

Summary of Appropriation by Program

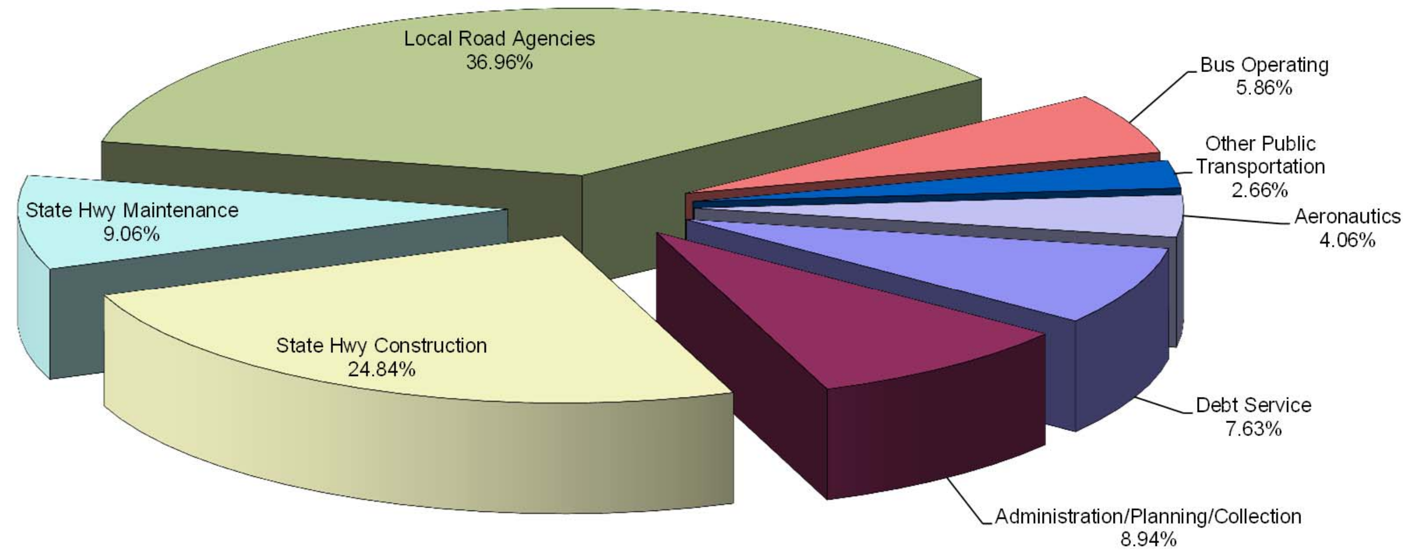
Program	**Total**	**Percent**
Debt Service	$246,813,000	7.63%
Administration/Planning/Collection	289,201,000	8.94%
State Hwy Construction	803,438,900	24.84%
State Hwy Maintenance	293,149,900	9.06%
Local Road Agencies	1,195,520,100	36.96%
Bus Operating	189,411,900	5.86%
Other Public Transportation	86,174,600	2.66%
Aeronautics	131,231,600	4.06%
Total	**$3,234,941,000**	100.00%

This table shows the breakdown of FY 2010-11 transportation appropriations by major program.

Transportation Budget - FY 2010-11

As enacted

Summary of Appropriation by Program



William E. Hamilton
12/3/2010

HOUSE FISCAL AGENCY

Transportation Budget - FY 2010-11

As enacted

Summary of Appropriation by Program

	Total		Highway Programs	Public Transportation	Aeronautics
State	1,649,866,500	*51.00%*	1,573,722,600	63,464,500	12,679,400
Local	1,585,074,500	*49.00%*	1,209,522,800	252,305,300	123,246,400
Total	**$3,234,941,000**		**$2,783,245,400**	**$315,769,800**	**$135,925,800**
			86.04%	*9.76%*	*4.20%*

This table shows the breakdown of FY 2010-11 transportation appropriations by major programs and by state/local distribution.

In this table "State" refers to programs under control of MDOT for state transportation purposes,
and "Local" refers to programs which involve the transfer of funds to local units of government.

Local units receiving highway program funds include county road commissions, and cities and villages (local road agencies).

Local units receiving public transportation funds include public transit agencies for local bus operating assistance.

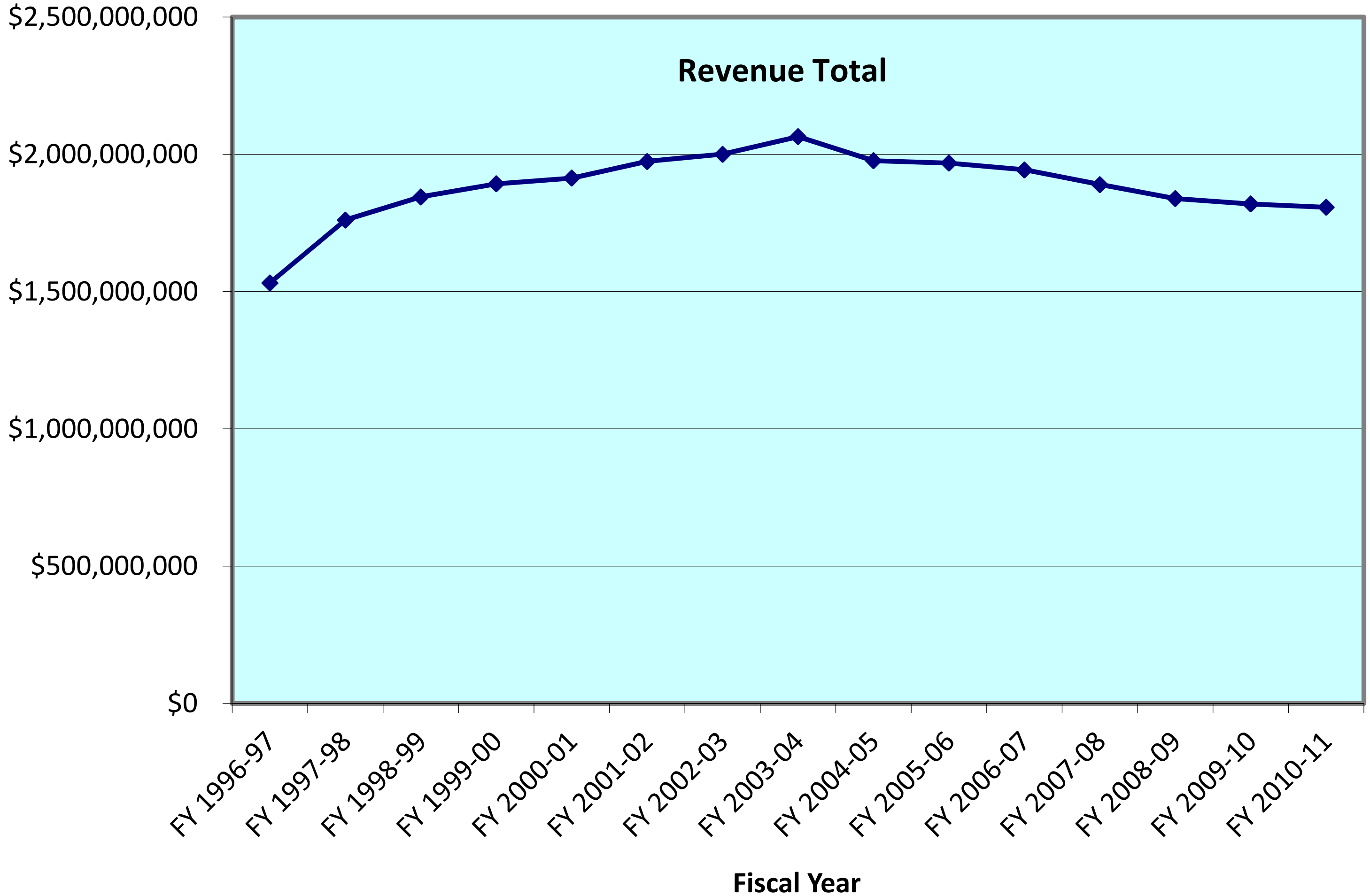
In some cases the classification of appropriations for this table as "state" or "local" is the judgment of the HFA analyst.

William E. Hamilton

December 3, 2010

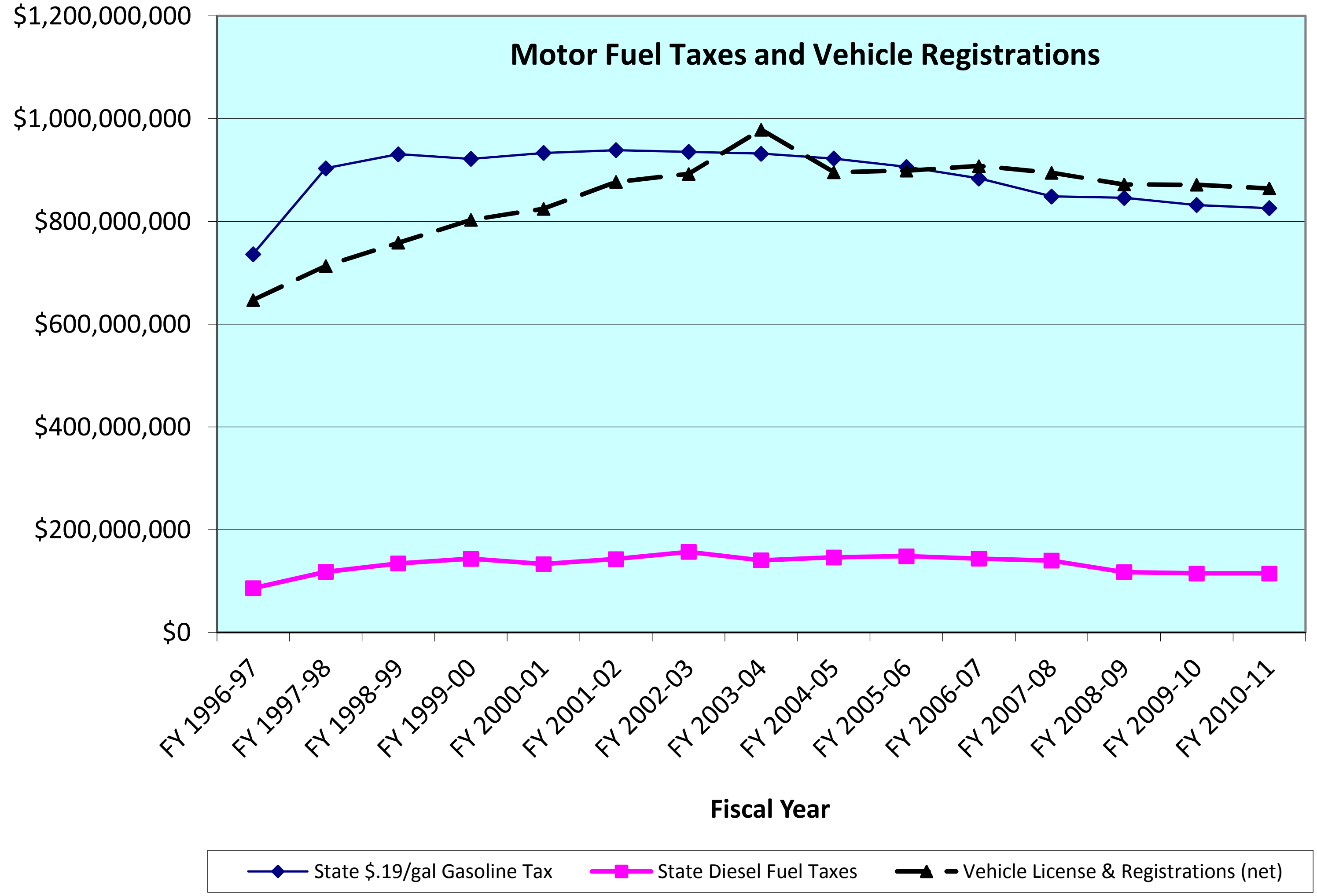
HOUSE FISCAL AGENCY

MTF Revenue History



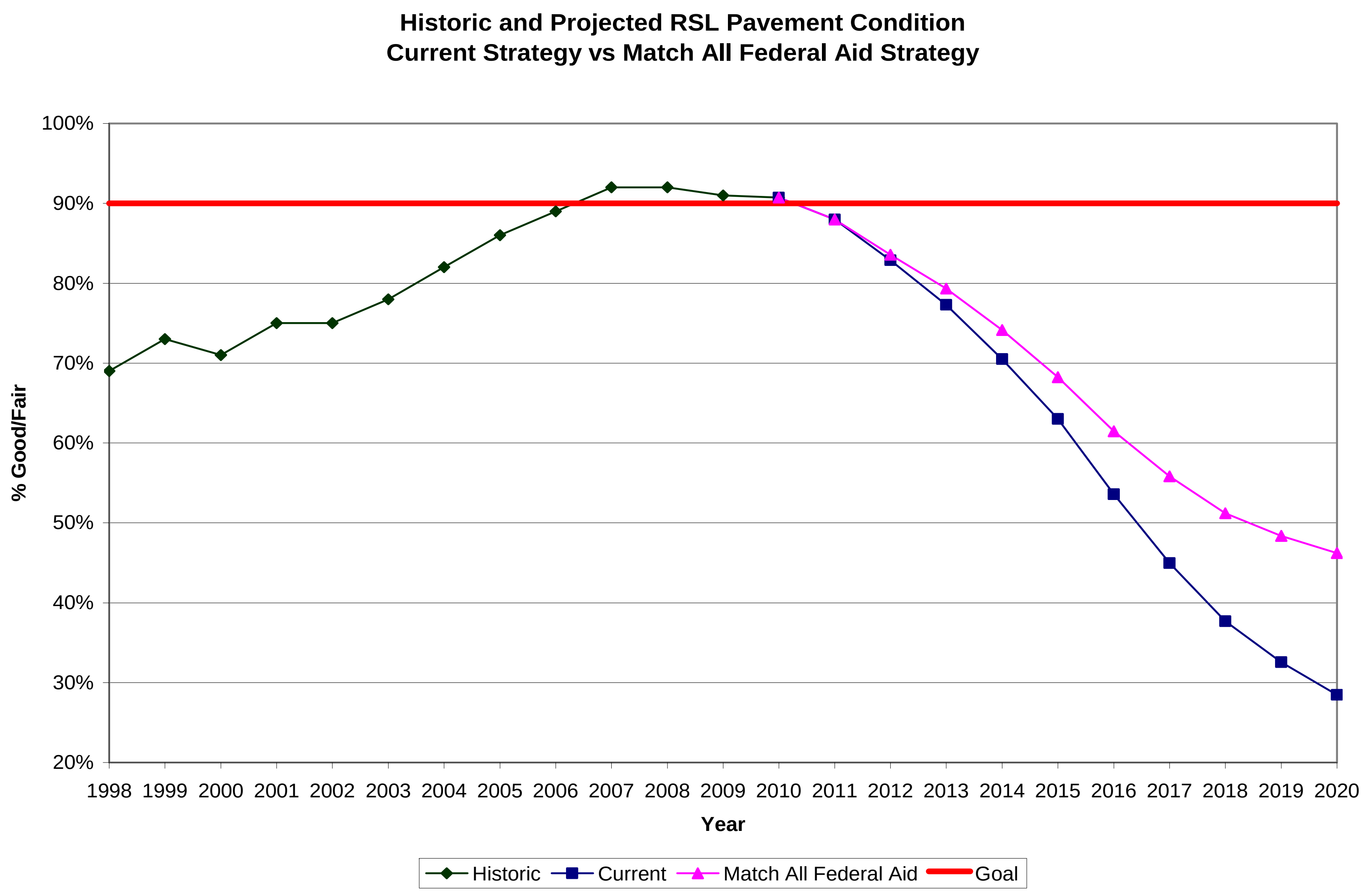
William E. Hamilton
12/3/2010

MTF Revenue History - Detail



William E. Hamilton
12/3/2010

Preserving the Highway System
How Long Will the Pavement Last?



Source: Michigan Department of Transportation